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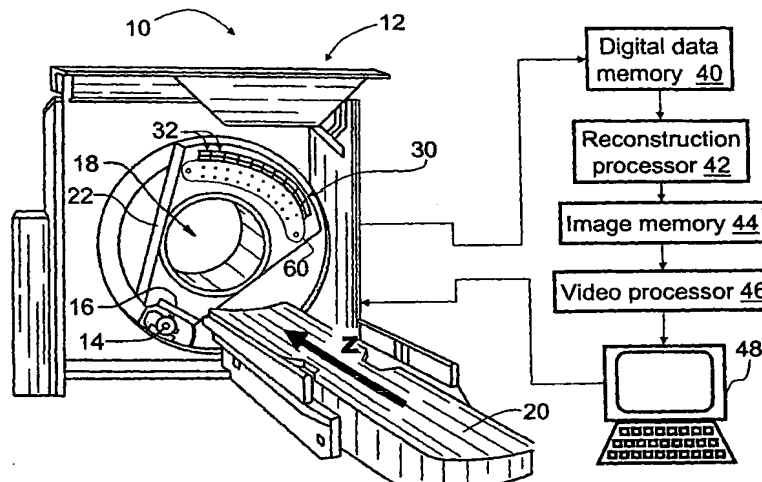
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(54) Title: **RADIATION MASK FOR TWO DIMENSIONAL CT DETECTOR**



(57) Abstract: A radiation detector (30) for a computed tomography scanner (12) includes a plurality of radiation detector modules (32). Each detector module (32) includes an anti-scatter module, at least one radiation absorbing mask (120) and a detector subassembly module (100). The anti-scatter module (32) includes radiation absorbing anti-scatter plates (80). The detector subassembly module (100) includes a substrate (102) and an array (104) of detector elements. The radiation absorbing mask (120) is a photoetched grid, formed of a radiation absorbing material and is positioned between the anti-scatter module (78) and the detector elements of array (104). The strip of the grid, that is parallel to the anti-scatter plates (80), is wider than each anti-scatter plate (80). The detector module (32) is aligned with a spatial focus (74) by inserting the alignment pins (160) into the alignment openings (128) of the radiation absorbing mask (120) and the alignment openings (162) of the detector subassembly module (100).